

ABSTRACT

A metallic glass alloy ribbon consists essentially of about 70 to 87 atom percent iron. Up to about 20 atom percent of the iron is replaced by cobalt and up to about 3 atom percent of the iron is replaced by nickel, manganese, vanadium, titanium or molybdenum. About 13-5 30 atom percent of the element balance comprises a member selected from the group consisting of boron, silicon and carbon. The alloy is heat-treated at a sufficient temperature to achieve stress relief. A magnetic field applied during the heat-treatment causes the magnetization to point away from the ribbon's predetermined easy magnetization direction. The metallic glass exhibits linear DC BH loops with low ac losses. As such they are 10 especially well suited for use in current/voltage transformers.